**Hunters Point Naval Shipyard.** The Navy is cleaning up the Hunters Point Naval Shipyard in San Francisco, California as part of its Base Realignment and Closure (BRAC) Program. Historical operations at the shipyard included the repair and disposal of radioluminescent dials, gauges, and deck markers, decontamination of ships contaminated during atomic weapons testing, and operation of the Naval Radiological Defense Laboratory. After remediation is complete, the property is to be transferred to the city of San Francisco, where more than 4,000 housing units are planned.

The cleanup was on track until 2012, when it was discovered that a Navy contractor (Tetra Tech EC) had falsified radiological sampling data. Initially, only a limited amount of data was thought to be unusable. Following additional allegations and further evaluation of the data, EPA concluded that more than 90% of the data was unusable or unreliable. The fallout has included prison time for two contractor employees, the need to reexcavate and retest previously remediated areas, and a Federal claim against the contractor that could total tens or hundreds of millions of dollars. The Navy expects to begin radiological retesting ~~expected to begin~~ in 2020, will delay cleanup for many years.

EPA has been working with the Navy to determine the extent of retesting required. In the first phase of the planned retesting, the Navy will re-excavate and resample tens of thousands of cubic yards of soil in locations where remediation was thought to be complete ~~will be reexcavated and resampled~~. If any radionuclides exceed remediation goals, the Navy will reexcavate and retest tens of thousands of additional soil.

The Navy is also reevaluating its radiological remediation goals for soil and buildings in advance of the retesting. EPA and the Navy are working to resolve several issues raised by the reevaluation, including the upper end of the cancer risk range (1 x 10-4 or higher?), additive risk where multiple radionuclides are present, use of the RESRAD calculator as an alternative to the PRG calculator, and the relationship between site remediation goals and background levels.

The cleanup continues to receive much attention by the community, elected officials, and the media. If you want to learn more about the site now, you can listen to "Toxic," a podcast series by two *San Francisco Chronicle* reporters devoted to the cleanup *(Wayne Praskins, Region 9).*

**Commented [SY1]:** I don't see the significance of this statement. If it's not relevant to the actual content of the presentation, then I suggest cutting it. It is distracting.

**Commented [SY2]:** Use another word. Outcome? Results? Effect? Fallout is too aligned with nuclear fallout.

**Commented [SY3]:** (I added "radiological retesting" because there are many other contaminants on site and we should be clear the retesting is for rad).

**Commented [SY4]:** Also, should we use "delay cleanup" as it may show that no additional "cleanup" is necessary. This retesting is delaying transfer.

**Commented [SY5]:** Do we want to nuance this a little? It might be a situation where we expect the Navy to trigger phase 2 (more than 33%) based on numbers lower than the remediation goals, based on the long-term protectiveness reevaluation. Right?

**Commented [SY6]:** For anyone who doesn't know about the 33% agreement, this quick discussion about a phase is *super* confusing. I suggest explaining this in a little more detail.

Some draft language from the past:
EPA and the Navy agreed to a phased approach for soil to focus on 33% of Parcel G trenches of greatest concern first. These results can inform decisions about the degree of excavation for the remaining trenches.